LISTING OF CLAIMS:

1. (Original) A method for discriminating a target objective, comprising the steps of:

transmitting and receiving radio waves for detecting a target objective based on radio waves reflected from said target objective;

obtaining automotive vehicle judgment data based on a receiving intensity of reflected radio waves from said target objective, as a value expressed in terms of a radar cross section equivalent to said receiving intensity; and

making a judgment as to whether said target objective is an automotive vehicle or not based on said automotive vehicle judgment data.

2. (Original) A method for discriminating a target objective, comprising the steps of:

transmitting and receiving radio waves for detecting a target objective based on radio waves reflected from said target objective, said radio waves being modulated so as to have an ascending section in which the frequency gradually increases and a descending section in which the frequency gradually decreases;

obtaining human objective judgment data based on a receiving intensity of reflected radio waves from said target objective obtained in each of said ascending section and said descending section, as a value representing temporal dispersion in the receiving intensity difference between said ascending section and said descending section; and

making a judgment as to whether said target objective is a human objective or not based on said human objective judgment data.

3. (Original) A system for discriminating a target objective, comprising:

target objective detecting means for transmitting and receiving radio waves to detect a target objective based on radio waves reflected from said target objective;

automotive vehicle judgment data producing means for producing automotive vehicle judgment data based on a receiving intensity of reflected radio waves from said target objective detected by said target objective detecting means, as a value expressed in terms of a radar cross section equivalent to said receiving intensity; and

automotive vehicle discriminating means for making a judgment as to whether said target objective is an automotive vehicle or not based on said automotive vehicle judgment data.

4. (Original) The target objective discriminating system in accordance with claim 3, further comprising

image processing means for detecting said target objective and specifying the type of said target objective based on image data obtained by picking up an image of an area including at least a detection area of said target objective detecting means, and

said image processing means makes a judgment as to whether said target objective is a human objective or not when said automotive vehicle discriminating means identifies said target objective as being not an automotive vehicle.

5. (Original) A system for discriminating a target objective, comprising:

target objective detecting means for transmitting and receiving radio waves for detecting a target objective based on radio waves reflected from said target objective, said radio waves being modulated so as to have an ascending section in which the frequency gradually increases and a descending section in which the frequency gradually decreases;

human objective judgment data producing means for producing human objective judgment data based on a receiving intensity of reflected radio waves from said target objective detected by said target objective detecting means in each of said ascending section and said descending section, as a value representing temporal dispersion width in the receiving intensity difference between said ascending section and said descending section; and

human objective discriminating means for making a judgment as to whether said target objective is a human objective or not based on said human objective judgment data.

6. (Original) The target objective discriminating system in accordance with claim 5, wherein said human objective judgment data producing means uses a standard deviation as said human objective judgment data to be produced.

7. (Original) The target objective discriminating system in accordance with claim 5, further comprising:

automotive vehicle judgment data producing means for producing automotive vehicle judgment data based on a receiving intensity of reflected radio waves from said target objective detected by said target objective detecting means, as a value expressed in terms of a radar cross section equivalent to said receiving intensity; and

automotive vehicle discriminating means for making a judgment as to whether said target objective is an automotive vehicle or not based on said automotive vehicle judgment data.

8. (Original) The target objective discriminating system in accordance with claim 7, wherein said automotive vehicle judgment data producing means uses an average of received

signal intensities detected in said ascending section and said descending section as said receiving intensity.

9. (Original) The target objective discriminating system in accordance with claim 5, wherein

said target objective detecting means serves as a primary target objective detecting means and,

said target objective discriminating system further comprises a secondary target objective detecting means for detecting a target objective existing in a detection area of said primary target objective detecting means based on a method different from that used by said primary target objective detecting means and for specifying an attribute of the detected target objective,

wherein said primary target objective detecting means comprises:

peak extracting means for extracting a peak frequency component in each of said ascending section and said descending section based on a beat signal which is obtained by mixing transmitted and received radio wave signals, said peak frequency component representing a frequency component where a signal intensity becomes a peak and larger than a predetermined extraction threshold;

predicting means for predicting, based on a position of said target objective detected by said secondary target objective detecting means, a frequency region where the peak frequency component corresponding to said target objective is extracted by said peak extracting means;

extraction threshold varying means for varying said extraction threshold used in said peak extracting means at the frequency region predicted by said predicting means, based on the

attribute of said target objective specified by said secondary target objective detecting means; and

target objective is detected by combining peak frequency components extracted by said peak extracting means.

10. (Original) The target objective discriminating system in accordance with claim 9, wherein the attribute to be specified by said secondary target objective recognizing means includes at least one of categories consisting of type, material, size of said target objective.

11. (Original) A program installable in a computer system for causing said computer system to function or operate as a target objective discriminating system comprising:

target objective detecting means for transmitting and receiving radio waves to detect a target objective based on radio waves reflected from said target objective;

automotive vehicle judgment data producing means for producing automotive vehicle judgment data based on a receiving intensity of reflected radio waves from said target objective detected by said target objective detecting means, as a value expressed in terms of a radar cross section equivalent to said receiving intensity; and

automotive vehicle discriminating means for making a judgment as to whether said target objective is an automotive vehicle or not based on said automotive vehicle judgment data.

12. (Original) A program installable in a computer system for causing said computer system to function or operate as a target objective discriminating system comprising:

target objective detecting means for transmitting and receiving radio waves for detecting a target objective based on radio waves reflected from said target objective, said radio waves

being modulated so as to have an ascending section in which the frequency gradually increases and a descending section in which the frequency gradually decreases;

human objective judgment data producing means for producing human objective judgment data based on a receiving intensity of reflected radio waves from said target objective detected by said target objective detecting means in each of said ascending section and said descending section, as a value representing temporal dispersion width in the receiving intensity difference between said ascending section and said descending section; and

human objective discriminating means for making a judgment as to whether said target objective is a human objective or not based on said human objective judgment data.

13. (New) The method in accordance with claim 1, wherein the making a judgment is performed automatically, by a computer.

14. (New) The method in accordance with claim 2, wherein the making a judgment is performed automatically, by a computer.

15. (New) The system in accordance with claim 3, wherein the making a judgment is performed automatically, by a computer.

16. (New) The system in accordance with claim 5, wherein the making a judgment is performed automatically, by a computer.

17. (New) The program in accordance with claim 11, wherein the making a judgment is performed automatically, by said computer system.

18. (New) The program in accordance with claim 12, wherein the making a judgment is performed automatically, by said computer system.